



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/647,896	10/06/2000	Ernst August Hahne	320.38785X00	7732

7590 04/24/2003

Antonelli Terry Stout & Kraus  
Suite 1800  
1300 North Seventeenth Street  
Arlington, VA 22209

EXAMINER

KOCH, GEORGE R

ART UNIT	PAPER NUMBER
----------	--------------

1734

DATE MAILED: 04/24/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/647,896

Applicant(s)

HAHNE ET AL.

Examiner

George R. Koch III

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The references cited in the Search Report submitted July 22, 2002 (form PCT/DO/EO/903) have been considered by the examiner, and have been made of record by addition to the PTO-892

### ***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claim 1, 6-9, 11-13, 15-16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima et al (USPN 5,138,971) in view of Watanabe (USPN 3,625,743).

As to claims 1 and 12, Nakajima discloses an apparatus capable of moistening a web that comprises a reversing roller (item 5, figure 4), an electrostatic charging device designed as a corona charging electrode associated with the roller (item 1, figure 4), and a liquid dispensing device (item 9, figure 4, see especially column 3, line 41 to column 5, line 22, and claim 1). The corona charging electrode and roller are upstream the coating device.

Nakajima only discloses dispensing on one face or side of the web. Nakajima does not disclose structure for dispensing on both faces of the web.

Art Unit: 1734

Watanabe discloses dispensers (items 40a and 40b), which dispense to both faces of the web. One in the art would immediately appreciate that spraying on both sides is useful when both sides of the web is being used (such as in magazine paper, wherein both sides carry content), and that spraying on both sides would logically ensure that both sides have similar properties, which is known to be useful for further paper processing, as cited in Watanabe (see column 1, lines 3-22, which discloses the benefits of making paper with homogenous water properties on both sides). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention desiring to ensure homogenous paper properties to use coating devices on both sides of the web as in Watanabe to replace the one sided coating device in the overall apparatus of Nakajima.

As to claim 6, Watanabe discloses that the wrap around at least one reversing roller forms at least a right angle (see item 43a).

As to claim 7 and 15, Nakajima's corona charging device can be interpreted in figure 4 as achieving the tangent line claimed.

As to claim 8 and 13, Watanabe discloses that the water spray heads are grounded.

As to claim 9, 11, and 16 Watanabe discloses that the spray heads are located opposite each other relative to the sides of the material web.

Art Unit: 1734

4. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima and Watanabe as applied to claim 1 above, and further in view of Blythe et al (USPN 3,863,108).

Nakajima is silent as to the properties of the reversing roller, except to disclose that it is connected to a ground source (see Figure 4, item 5, which is connected to the universal symbol for ground) as cited in claim 4.

As to claims 2 and 3, Blythe discloses that the reversing roller is preferably highly polished and is even more preferably polished chrome steel, i.e., similar to chrome plated (column 4, lines 18-32). Blythe also discloses chrome plated as another embodiment ("chromium plated roller 2", in column 6, lines 26-33 and "chromium plated roller 23" in column 6, lines 60-68). Chrome materials are known to be good electrical conductors. Blythe also discloses that one would use such a roller "to prevent the film being damaged when it contacts the roller". Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized a polished chrome plated reversing roller which is inherently a good electrical conductor, and smooth due to polishing, as in Blythe in the overall apparatus of Nakajima and Watanabe, in order to prevent damage to the web or film.

5. Claims 5 and 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima and Watanabe as applied to claim 1 above, and further in view of Mitsuoka (US Patent 5,867,760).

Art Unit: 1734

As to claim 5 and 10, Nakajima and Watanabe as applied to claim 1 above do not disclose using a roller that has a jacket having a smooth outer surface and a thin coating provided on the smooth outer surface.

Mitsuoka discloses a roller 24, which has a dielectric layer (item 24a) of polyethylene terephthalate formed on an aluminum sleeve 24b. One in the art would appreciate that such a roller provides excellent electrostatic properties, as well as ease in replacing a worn surface. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized such a roller in order to provide excellent electrostatic capabilities and ease in replacing a worn surface.

6. Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima and Watanabe as applied to claim 12 above, and further in view of Kisler (USPN 4,826,703)

Nakajima and Watanabe are silent as to charging the spray device at an opposite polarity as of that of the corona charging electrode.

Kisler discloses that it is known for the spraying device to be an opposite polarity as the charging device (see, for example, Figure 2a or 4a). One in the art would appreciate that the key element in electrostatic coating is the difference in charge between the two elements, and not the polarities. One would select either version as a design choice. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized, as a design choice, a spray head of the opposite polarity in order to effectively coat the substrate.

### ***Response to Arguments***

7. Applicant's arguments filed 2-11-2003 have been fully considered but they are not persuasive.

8. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., i.e., the 95 to 98 percent efficiencies, i.e.) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

9. Furthermore, as to applicant's arguments that the coating devices of Watanabe would not be used with the coating device of Nakajima, it is noted that the rejection does not propose that it is obvious to do so, but rather, that it is obvious to replace the coating device of Nakajima with the coating devices of Watanabe.

### ***Conclusion***

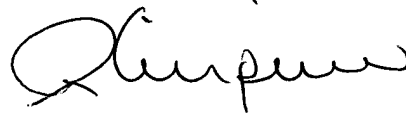
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R. Koch III whose telephone number is (703) 305-3435 (TDD only). If the applicant cannot make a direct TDD-to-TDD call, the applicant can communicate by calling the Federal Relay Service at 1-800-877-8339 and giving the operator the above TDD number. The examiner can normally be reached on M-Th 10-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (703) 308-3853. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



George R. Koch III  
April 21, 2003



RICHARD CRISPINO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700